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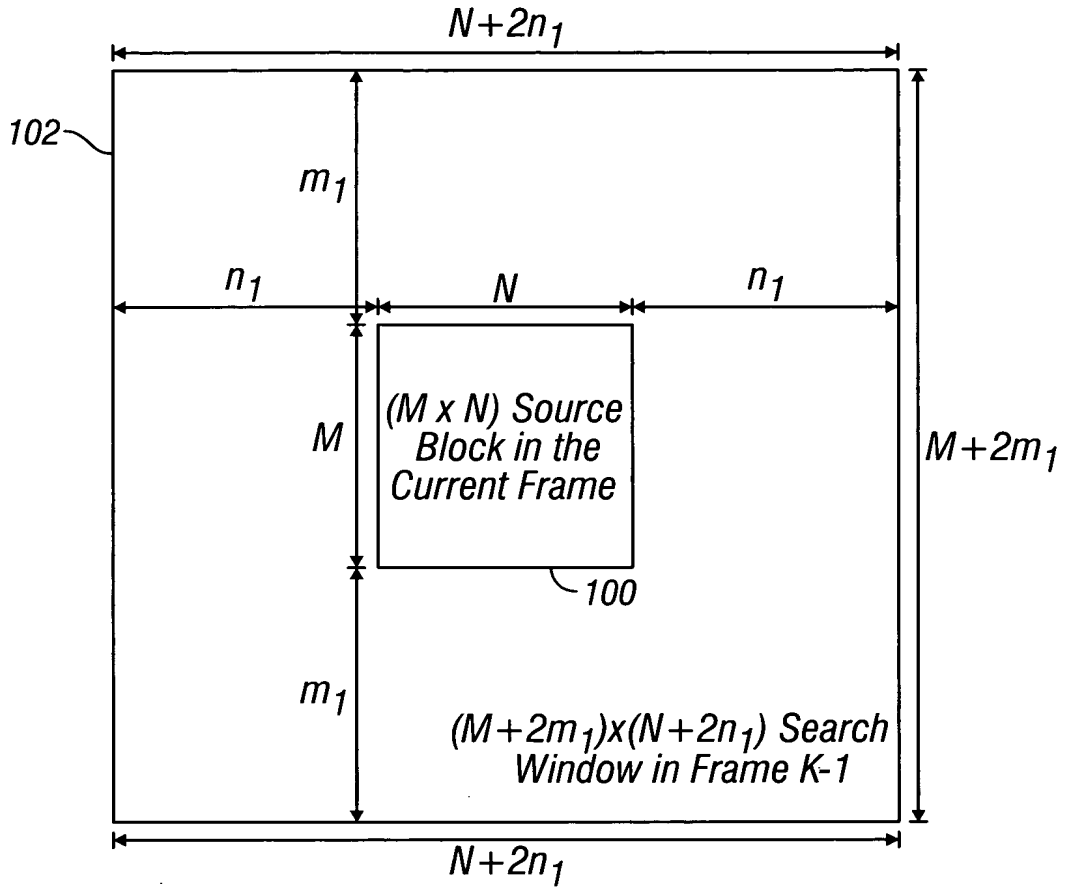
N+2n1
102
m1
n1
N
n1
M
(M x N) Source Block in the Current Frame
100
M+2m1
m1
(M+2m1)x(N+2n1) Search Window in Frame K-1
N+2n1

FIG. 1

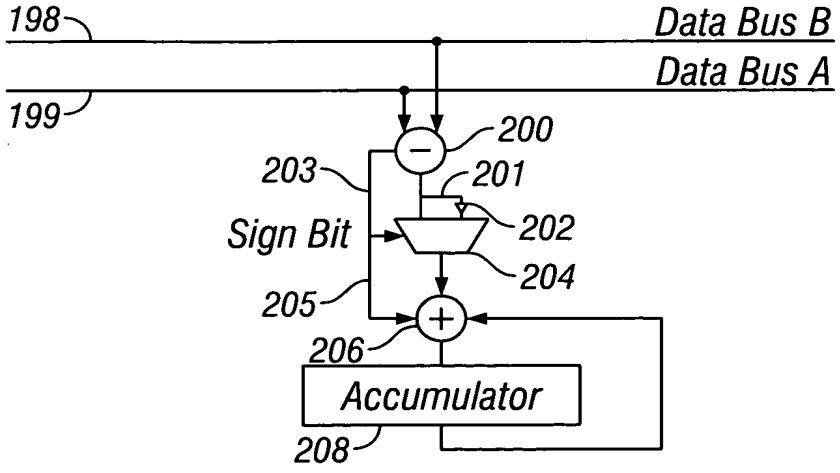
198
Data Bus B
Data Bus A
199
200
203
201
Sign Bit
202
204
205
206
Accumulator
208

FIG. 2

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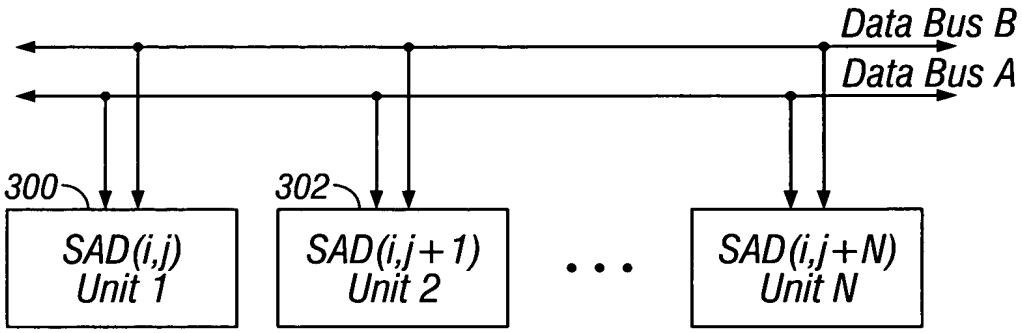

FIG. 3A

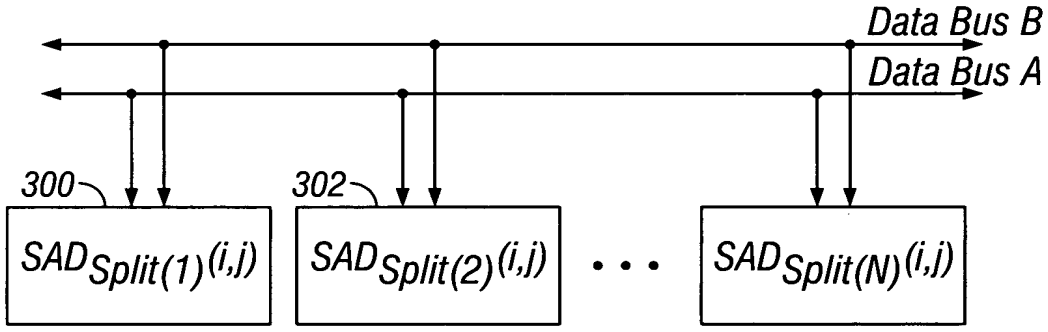

FIG. 3B

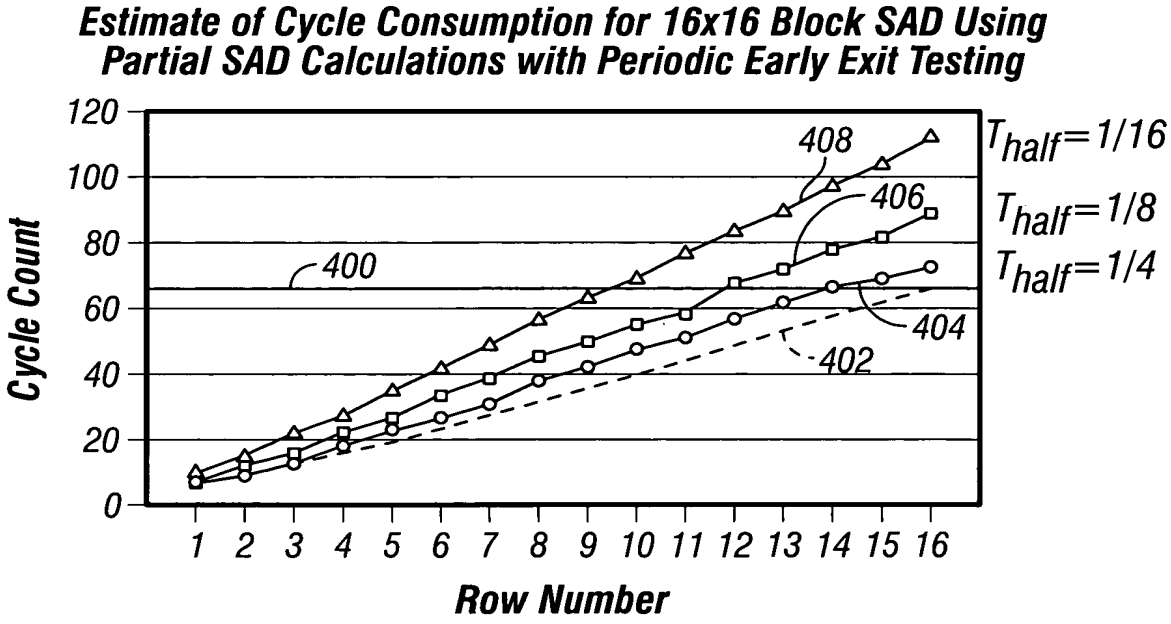

FIG. 4

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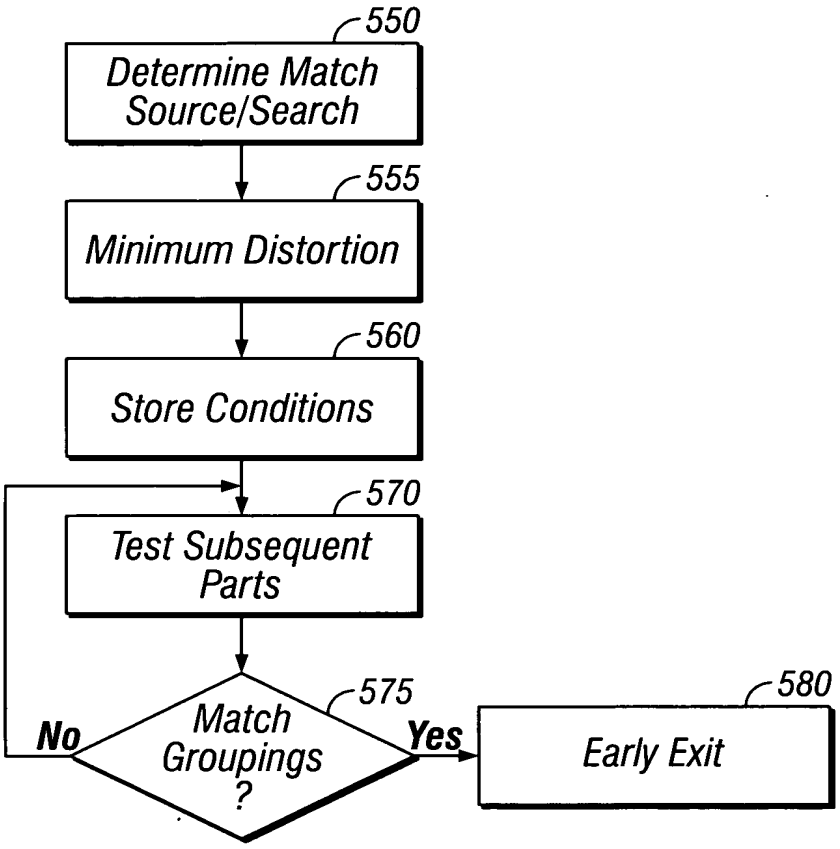
550
Determine Match Source/Search
555
Minimum Distortion
560
Store Conditions
570
Test Subsequent Parts
575
Match Groupings ?
No
Yes
580
Early Exit

FIG. 5

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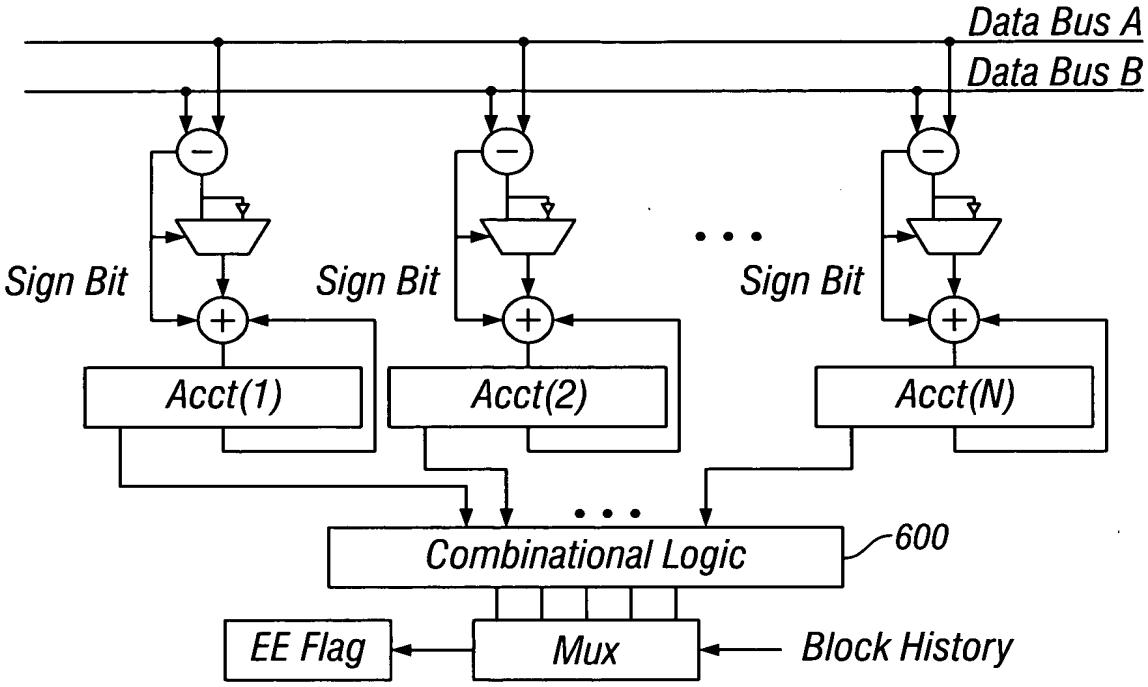

FIG. 6A

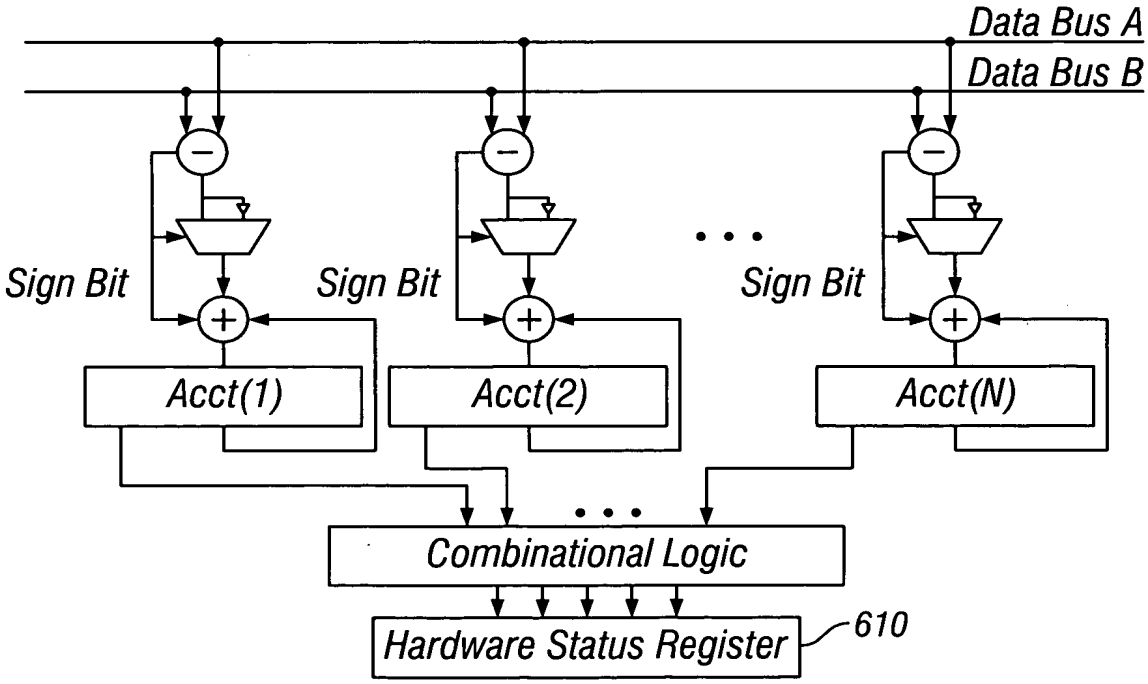

FIG. 6B

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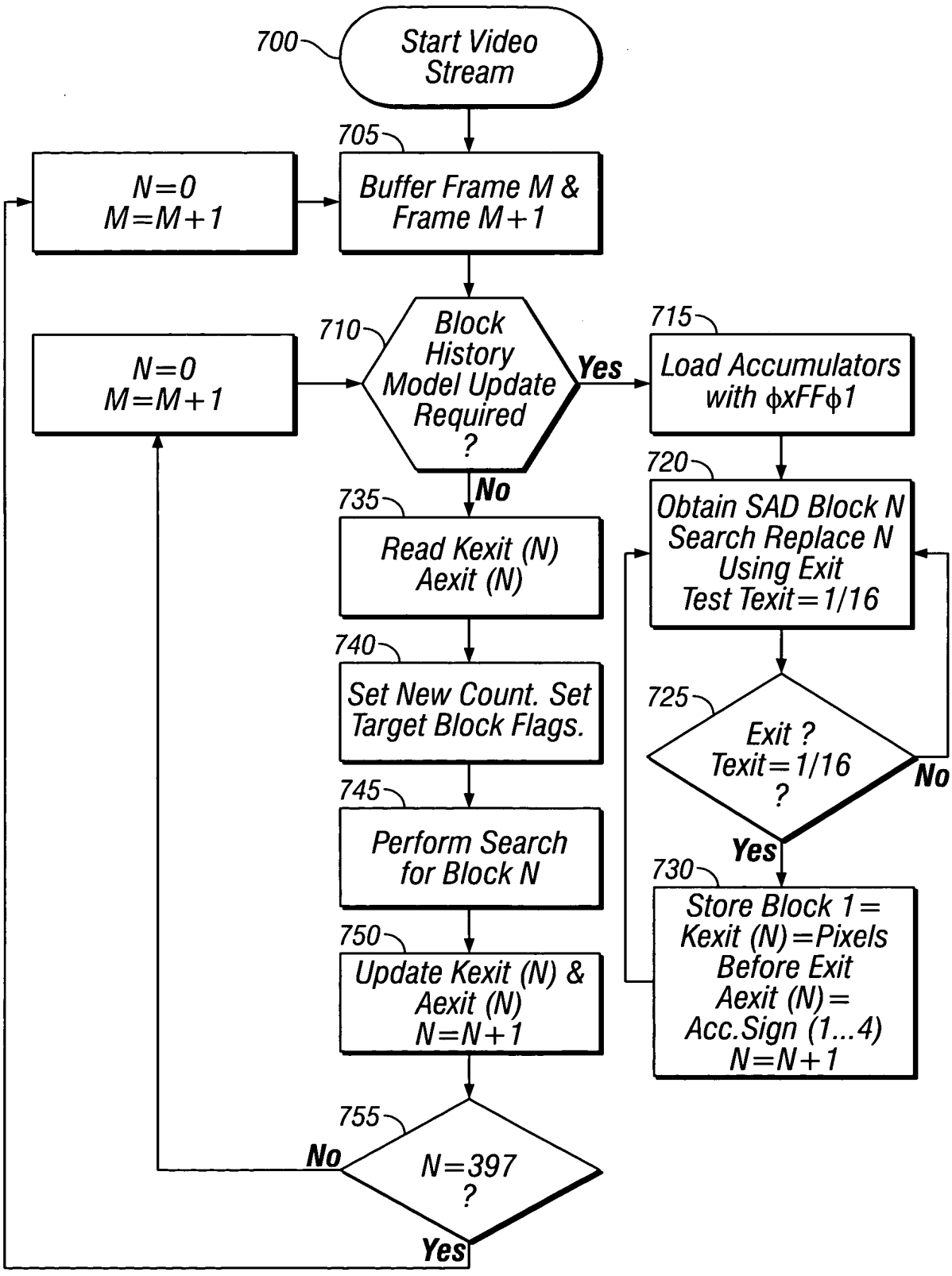
700
Start Video Stream
705
Buffer Frame M & Frame M+1
N=0
M=M+1
710
Block History Model Update Required ?
Yes
No
N=0
M=M+1
715
Load Accumulators with ϕxFFϕ1
720
Obtain SAD Block N Search Replace N Using Exit Test Texit=1/16
725
Exit ? Texit=1/16 ?
No
Yes
730
Store Block 1= Kexit (N)=Pixels Before Exit Aexit (N)= Acc.Sign (1...4) N=N+1
735
Read Kexit (N) Aexit (N)
740
Set New Count. Set Target Block Flags.
745
Perform Search for Block N
750
Update Kexit (N) & Aexit (N) N=N+1
755
N=397 ?
No
Yes

FIG. 7